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10/803,908	03/19/2004	Bycong-Jin Lim	SAMHEE.051	6716

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EXAMINER

KHAN, USMAN A

ART UNIT	PAPER NUMBER
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2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,908

Applicant(s)

LIM ET AL.

Examiner

Usman Khan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/19/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/19/2004 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Claim Objection

Claim 11 is objected to because of the following informalities: in claim 11 "wherein the camera module is coupled to network" should be changed to "wherein the camera module is coupled to a network" for proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5 – 14, and 16 - 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Spann et al. (US patent No. 6,466,248).

Regarding **claim 1**, Spann et al. teaches a network camera (column 3 lines 15 *et seq.*; videoconferencing) integrated with a camera module (figure 3 item 1; videoconference station with camera), comprising: a first moving picture encoder for displaying a real-time moving picture (figure 3, item 3 i.e. first encoder leading to item 10 i.e. conference bridge leading to a display; also, column 3 lines 15 *et seq.*); and a second moving picture encoder for recording (figure 3, item 4 i.e. second encoder leading to item 5 i.e. memory; also, column 3 lines 15 *et seq.*), wherein the first and second moving picture encoders compress a digital image captured by the camera module at different picture qualities and rates (the number of frames per second), separately from each other (column 3, lines 15 – 32), and transmit the separately compressed images to a network (column 3, lines 28 – 56).

Regarding **claim 3**, Spann et al. teaches a network camera (column 3 lines 15 *et seq.*; videoconferencing) separated from a camera module (figure 3 item 1; videoconference station with camera), comprising: a first moving picture encoder for displaying a real-time moving picture (figure 3, item 3 i.e. first encoder leading to item 10 i.e. conference bridge leading to a display; also, column 3 lines 15 *et seq.*); and a second moving picture encoder for recording (figure 3, item 4 i.e. second encoder

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leading to item 5 i.e. memory; also, column 3 lines 15 *et seq.*), wherein the network camera converts an analog video signal received from a separate video camera through a cable into digital video data using a video decoder and multiplexes the converted digital video data to respectively apply the multiplexed data to the first and second moving picture encoders (column 1 lines 23 – 28; also, it is inherent that the incoming analog video signal will be converted to digital signal through the camera which will be sent in figure 3 from item 1 to items 3 and 4), which in turn compress the digital video data at different picture qualities and rates (the number of frames per second), separately from each other (column 3, lines 15 – 32), and transmit them to a network (column 3, lines 28 – 56).

Regarding **claim 5**, Spann et al. teaches a network digital video recorder that receives data (figure 3, item 4 i.e. second encoder leading to item 5 i.e. memory; also, column 3 lines 15 *et seq.*), which is obtained by dually compressing an image at different picture qualities and rates (column 3, lines 15 – 32; using encoders 3 and 4), from each of a plurality of network cameras through a network (column 3 lines 15 *et seq.*; videoconferencing), decompresses data compressed by a first moving picture encoder to display it on a monitor in real time (figure 3, item 3 i.e. first encoder leading to item 10 i.e. conference bridge leading to a display; also, column 3 lines 15 *et seq.*; it is inherent that the display used after the conference bridge will be decompressed for viewing), and stores data compressed by a second moving picture encoder without decompressing it (figure 3, item 4 i.e. second encoder leading to item 5 i.e. memory;

also, column 3 lines 15 *et seq.*), the network cameras being integrated with a camera module or separated from the camera module (figure 3 item 1; videoconference station with camera).

Regarding **claim 6**, Spann et al. teaches an apparatus configured to: transmit or receive first compressed video data (figure 3, item 3 i.e. first encoder leading to item 10 i.e. conference bridge leading to a display; also, column 3 lines 15 *et seq.*); transmit or receive second compressed video data (figure 3, item 4 i.e. second encoder leading to item 5 i.e. memory; also, column 3 lines 15 *et seq.*), wherein: the first compressed video data and the second compressed video data are both compressed from the same source video data (figure 3; items 3 and 4 coming from item 1); the first compressed video data and the second compressed video data are compressed at different compression ratios (column 3, lines 15 – 32).

Regarding **claim 7**, as mentioned above in the discussion of claim 6, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the first compressed video data is compressed at a higher compression ratio than the second compressed video data; the first compressed video data is for recording; and the second compressed video data is for displaying (column 3 lines 6 – 27 and figure 3).

Regarding **claim 8**, as mentioned above in the discussion of claim 6, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that

the apparatus is a camera (figure 3 item 1 including a camera from which video signals are outputted).

Regarding **claim 9**, as mentioned above in the discussion of claim 8, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the camera is a network camera (Abstract and column 1 lines 4 *et seq.* video conferencing system).

Regarding **claim 10**, as mentioned above in the discussion of claim 6, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the apparatus is a camera module (figure 3 item 1 including a camera from which video signals are outputted).

Regarding **claim 11**, as mentioned above in the discussion of claim 10, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the camera module is coupled to a network (Abstract and column 1 lines 4 *et seq.* video conferencing system).

Regarding **claim 12**, as mentioned above in the discussion of claim 6, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the apparatus is a digital video recorder (column 3 lines 15 *et seq.* non-volatile storage).

Regarding **claim 13**, as mentioned above in the discussion of claim 12, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the digital video recorder is a network digital video recorder (column 3 lines 15 *et seq.* non-volatile storage leading to a network to be shared between the videoconference participant stations upon request or automatically).

Regarding **claim 14**, as mentioned above in the discussion of claim 6, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the first compressed video data and the second compressed video data are transmitted or received over a network (column 3 lines 15 *et seq.*; videoconferencing i.e. first compressed video transmitted over a network; and column 3 lines 15 *et seq.* non-volatile storage leading to a network to be shared between the videoconference participant stations upon request or automatically i.e. second compressed video transmitted over a network).

Regarding **claim 16**, as mentioned above in the discussion of claim 6, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that the first compressed video data is compressed at a first encoder and the second compressed video data is compressed at a second encoder (figure 3; items 3 and 4 coming from item 1; and column 3, lines 15 – 32).

Regarding **claim 17**, as mentioned above in the discussion of claim 16, Spann et al. teaches all of the limitations of the parent claim. Additionally, Spann et al. teaches that at least one of the first encoder and the second encoder are coupled to a camera (figure 3; items 3 and 4 coming from item 1; and column 3, lines 15 *et seq.*).

Regarding **claim 18**, as mentioned above in the discussion of claim 17, Spann et al. teaches all of the limitations of the parent claim. Additionally, It is inherent that the camera in figure 3 item 1 will first produce a analog signal from the inputting light and this light will be converted to digital signal through a A/D decoder to be outputted for processing).

Regarding **claim 19**, as mentioned above in the discussion of claim 16, Spann et al. teaches all of the limitations of the parent claim. Additionally, It is inherent that the camera in figure 3 item 1 will first produce a analog signal from the inputting light and will be converted to digital signal through a A/D decoder to be outputted for processing; this output from the A/D decoder will be sent to items 3 and 4 of figure 3).

Regarding **claim 20**, as mentioned above in the discussion of claim 19, Spann et al. teaches all of the limitations of the parent claim. Additionally, It is inherent that the camera in figure 3 item 1 will first produce a analog signal from the inputting light and will be converted to digital signal through a A/D decoder to be outputted for processing; this output from the A/D decoder will be sent to items 3 and 4 of figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spann et al. (US patent No. 6,466,248) in further view of Coufal et al. (US PgPub 2003/0163829).

Regarding **claims 2 and 4**, Spann et al. teaches most of the limitations of claims 1 and 3 respectively, However Spann et al. fails to teach that the network camera has two video decoders respectively connected to the first and second moving picture encoders to convert an analog video signal into digital video data with different resolutions such that the first and second moving picture encoders can respectively set resolutions as well as picture qualities and rates, separately from each other. Coufal et al., on the other hand teaches that the network camera has two video decoders respectively connected to the first and second moving picture encoders to convert an analog video signal into digital video data with different resolutions such that the first and second moving picture encoders can respectively set resolutions as well as picture qualities and rates, separately from each other.

More specifically, Coufal et al. teaches that the network camera has two video decoders respectively connected to the first and second moving picture encoders to

convert an analog video signal into digital video data with different resolutions such that the first and second moving picture encoders can respectively set resolutions as well as picture qualities and rates, separately from each other (figure 2, decoders 1 and 2; also when combined with Spann et al. invention the first and second moving picture encoders can respectively set resolutions as well as picture qualities and rates, separately from each other).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Coufal et al. with the teachings of Spann et al. because as stated in paragraph 0011 Coufal et al. teaches that the use of the changeover switch used in the invention can switch a video signal from primary equipment to back-up equipment upon the failure of the primary equipment.

Claims 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spann et al. (US patent No. 6,466,248) in further view of Examiners Official Notice.

Regarding **15**, as mentioned above in the discussion of claim 14 Spann et al. teaches all of the limitations of the parent claim. However, Spann et al. fails to teach that the network is an Ethernet network.

The examiner takes Official Notice that it is old and well known in the art to have a network using an Ethernet.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an Ethernet network for: high performance, increased reliability, increased distance, and expanded support of devices.

Regarding **claim 21**, as mentioned above in the discussion of claim 16, Spann et al. teaches all of the limitations of the parent claim.

However, Spann et al. fails to teach that the first encoder is coupled to a camera through a first decoder; and the second encoder is coupled to the camera through a second decoder.

The examiner takes Official Notice that it is old and well known in the art to use two different decoders linked to two different encoders.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use two different decoders linked to two different encoders to have an easy method for providing two different images such as still image and moving image to the encoders.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Suzuki (US patent No. 5,724,476) teaches multiple compression rates in a single unit one for displaying one for recording.

Ohta et al. (US patent No. 5,579,121) teaches multiple compression rates in a single unit one for displaying one for recording.


Chun (US patent No. 5,671,009) teaches multiple compression rates in a single unit one for displaying one for recording.

Lim et al. (US PgPub 2004/0046706) teaches multiple cameras using multiple encoders and decoders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Usman Khan
4/24/2007.
Patent Examiner
Art Unit 2622



DAVID OMETZ
SUPERVISORY PATENT EXAMINER